



TechNotes

Editor - Roland Asp, CET

#490

06/28/2022

This edition of TechNotes was written by Roland Asp, CET, Manager of Codes and Standards for NFSA.

NFSA TechNotes #490 - Best of NFSA's Expert of the Day: NFPA 13 – Installation Rules

The NFSA processes over 1,200 informal interpretations a year from its members. This is done through the Expert of the Day (EOD) program, where members ask the industry's top fire sprinkler subject matter experts questions on fire sprinkler related rules, codes, and standards.

NFSA has been offering the EOD service to our members since 2004 and it has proven to be one of the most valuable and popular of the many benefits of NFSA membership. Members submit real world questions regarding water-based fire protection systems and receive an accurate and timely answer to their question. These responses have saved our members time and money and have helped ensure that the fire protection systems meet the requirements of the applicable codes and standards.

NFSA subject matter experts (SME) include Professional Engineers (PE), Certified Engineering Technicians (CET), Certified Building Officials (CBO), and more. Several SMEs have high-level NICET certifications for the Inspection and Testing of Water-Based Systems and Water-Based System Layout. Our SMEs are also members of many NFPA and ICC committees, so they have additional knowledge beyond the wording of the code or standard—and know why it was implemented. This insight can prove very valuable when navigating the sometime confusing matrix of codes, standards, and other resources that make up the fire sprinkler industry.

Upcoming TechTuesdays

The next 6 months of TechTuesday webinars will be a series of “best of” topics and will highlight some of the best and interesting questions posed to the EOD program.

July: NFPA 13 – Installation Rules

August: NFPA 13 – Discharge Rules

September: NFPA 14 – Standpipes

October: Model Codes – ICC and NFPA

November: NFPA 25 – ITM

December: NFPA 20 – Fire Pumps



Bringing Reliable[®]
Quality to GROOVED

The Data of EOD

NFSA uses the data from EOD for more than just answering an individual question. NFSA also analyzes the incoming questions to see if there are common themes which may indicate that additional work needs to be done on a particular topic. For example, if a specific question is being asked over and over, perhaps NFPA 13 (or the applicable code or standard) needs to be clarified or additional research may be warranted. The data contained in the EOD program is a powerful tool that NFSA is using to make our industry and the relevant codes and standards even more effective. Many of the changes to the NFPA standards originated as a question to the EOD program.

The collection and analysis of the data from the EOD program took a great leap forward in July 2020 when NFSA rolled out our new EOD process. Requests for an informal technical interpretation to the NFSA EOD program have traditionally been by fax, phone, or email. Starting on July 15, 2020, the NFSA transferred the EOD process to a new association management system (AMS). This system allows the member to easily submit questions, track the progress, and view their EOD cases. For those who are not familiar with this “new process,” Technotes Issue #442 reviews this process. This technotes can be accessed here:

[TechNotes Issue #442](#)

This new process not only improved the member experience with EOD, it also greatly improved NFSA’s ability to track the topics and to drill down to specific sections of the codes and standards. This is valuable information that NFSA has and will continue to use to clarify the related codes and standards.

As an example, in the first 6 months or so of 2022, the top ten topics addressed by EOD regarding NFPA 13 (all edition years) were as follows:

| Topic | Count of Topic |
|--|----------------|
| Obstructions | 122 |
| Concealed Spaces | 49 |
| Commodity Classification | 47 |
| Hazard and Occupancy Classification | 38 |
| Design Area | 32 |
| Exterior Projections | 25 |
| Hangers and Support | 24 |
| Seismic Protection | 22 |
| Fire Department Connections (FDC) | 22 |
| ESFR Obstructions | 20 |
| ESFR Sprinkler Protection | 20 |
| Sidewall Sprinklers | 20 |

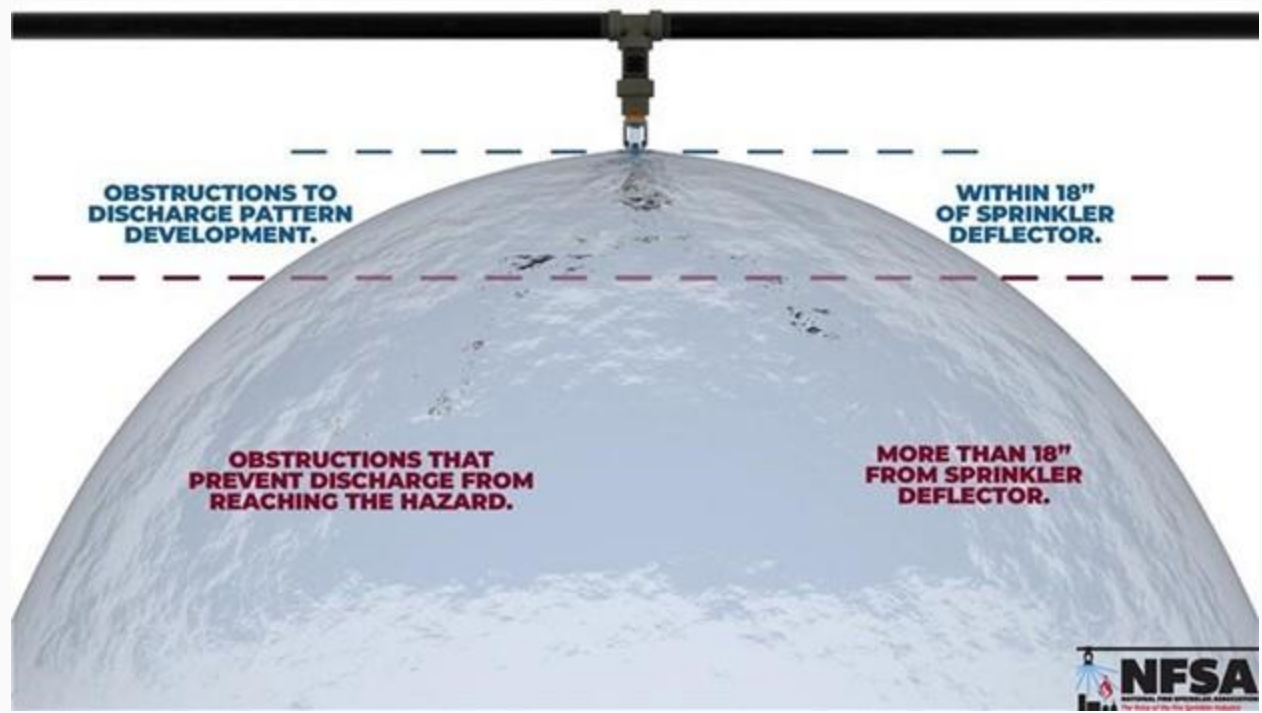
As it pertains to the installation committee, the data shows that obstructions, concealed spaces, and exterior projections generated the majority of questions. This indicates that these topics may need to be clarified in NFPA 13.

EOD Data in Action

In fact, this data has already been used to improve the standards and each of these topics have been addressed in the 2022 edition of NFPA 13:

Obstructions:

The obstruction rules within NFPA 13 were substantially revised in the 2022 edition in order to clarify and expand upon this often-confusing topic. The obstruction tables throughout the standard have been reformatted to reduce confusion and new obstruction rules were added to the standards to deal with situations that were not addressed in earlier editions. For example, new rules for Suspended or Floor-Mounted Vertical Obstructions in Ordinary Hazard Occupancies was developed. Previous editions of NFPA 13 dealt with this subject in light hazard occupancies only. As shown by the number of EOD questions on this subject, this new rule adds much needed clarification to the standard.



Concealed Spaces:

The data shows the concealed spaces are another topic that is in need of clarification. Recent additions to NFPA 13 have clarified this sometimes-confusing topic. For example, based upon actual EOD questions, a new section was added to NFPA 13 (9.2.1.2.2) to clarify that non-combustible or limited combustible spaces with non-fueled fired equipment (such as vertical terminal air conditioner or VTAC units) with an access panel for maintenance is simply a type of concealed space and sprinkler protection is not required. Another example is soffits of combustible construction. Section 9.2.1.11 in the 2022 edition of NFPA 13 indicates that soffits of combustible construction will not require sprinkler protection where they are below noncombustible or limited combustible ceilings and are separated into volumes not exceeded 160 cubic feet. The annex to this section states that the interior of the soffit may contain ductwork, electrical components and plumbing and mechanical equipment. Further, it states that it is not the intent to require dampers the ductwork.

Exterior Projections:

Based upon a number of EOD questions on exterior projections, it was clear that this topic was another confusion point in NFPA 13. To help clarify the requirements for this topic, a new definition was added that defines exterior definition for the first time. Section 3.3.73 defines an exterior projection as an extension beyond an exterior wall that can collect heat below. This definition (and other changes to the exterior projection rules) will help clarify where and when sprinkler projection is required in these building features. It should also be noted that the balcony rules from NFPA 13R were brought into NFPA 13. For the first time, balconies (with a roof above) serving dwelling units in a Type V building protected with a NFPA 13 system will require sprinkler protection.

The above is but a few examples of how the questions submitted to NFSA's EOD program help make the relevant NFPA standards better and to continue to provide unsurpassed life and property protection. Member questions help ensure that the fire sprinkler industry is part of this process.

NFSA will continue answering members EOD questions and use the information to help improve the applicable codes and standards.

The EOD service is not only a member benefit but is also a benefit to the entire fire sprinkler industry.



Learning and Development



**Come see us at
Headquarters!**



Learning Branches



**What's New with NFSA's
Layout Technician Class?**

Team NFSA has made available a variety of classes occurring once a month at NFSA HQ in Baltimore, MD. Joining us at headquarters not only provides you with a top-notch, in-person learning experience, but also gives you face time with NFSA staff and increased access to NFSA resources!

In an effort to provide more real-time learning opportunities that are accommodating of various schedules, Team NFSA is hosting a new webinar series, Learning Branches. These technical sessions, available for Continuing Education Units, cover a large spectrum of topics and will be scheduled on various days and times each month.

Register now!

The NFSA's Learning and Development Team has restructured and revamped its Layout Technician class. While the course maintains many of its core contents and topics, it is being taught in a new way that provides deeper learning, more engaging activities, and directly applicable real-world scenarios.

[Learn More and Register Here](#)

The National Fire Sprinkler Association is proud to present our NEW 2019-2020 Edition EOD Handbook

The EOD Handbook is now a three-volume set of over 1,500 pages covering hundreds of topics that are relevant to automatic fire sprinkler systems, standpipes, water supplies, inspection, testing and maintenance, codes, and standards.

Order the latest volume, the 2019-2020 Edition, as a single book or order the three-volume set!



National Fire Sprinkler Association

514 Progress Dr, Ste A,
Linthicum Heights, MD 21090
1-800-683-NFSA (6372)



[Unsubscribe](#)